

Vascular plants from Kunashiri Island, the southernmost island of the Kuril Islands, island arc between Hokkaido and Kamchatka peninsula

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Abstract: Vascular plants of the Kunashiri Island, the southernmost island of the Kuril Islands, were inventoried during an expedition to Kunashiri, 19–25 July 2013. This study was conducted as a part of the Sika Deer (*Cervus nippon yezoensis*) management program in Shiretoko World Natural Heritage Site, to assess vegetation damage under strong browsing pressure by the deer. A checklist of the vascular plants was made from each study locality. As Kunashiri Island is very close to Shiretoko Heritage Site, with similar climatic and geographical conditions, this plant list will provide a preliminary comparison of the floral composition between Kunashiri and Shiretoko or Hokkaido. Our research revealed that vegetation is well preserved on Kunashiri, and this floral list will serve as a reference of the original floral composition of Shiretoko World Natural Heritage Site prior to damage by deer.

Keywords: Sika Deer (*Cervus nippon yezoensis*), flora, Kunashiri, Kuril Islands

INTRODUCTION

Kunashiri is the southernmost island of the Kuril Islands and holds a close floristic relationship with neighboring mainland Hokkaido. The island is considered to have been connected with Hokkaido and Shikotan until after the last glacial period (Melekestsev *et al.* 1974). The geological environment of Kunashiri resembles that of Shiretoko Peninsula of eastern Hokkaido in its mountainous topology with volcanic activities. The flora of Kunashiri Island has been reported several times (*e.g.*, Miyabe 1890; Matsumura 1943; Tatewaki 1957; Alekseeva 1977, 1983; Voroshilov 1982; Barkalov 1980, 2009; see Takahashi 1997 for details); these reports were integrated in a recent publication by Barkalov (2009). However, in these studies, the flora and vegetation of the island are often treated as a part of the Kuril Islands or the Sakhalin region of mainland Asia (Russia). In order to better understand the flora and vegetation of the Kunashiri, comparisons of floristic composition with Shiretoko or Hokkaido are also necessary,

and as species concepts employed by Russian taxonomists sometimes differ from that of Japanese taxonomists, such comparisons are helpful to remedy this situation. To do this, thorough comparisons in both areas of the floral composition in each major vegetation types are needed.

This assembled check list is the result of a vegetation study undertaken as a part of the Sika Deer management program in Shiretoko World Natural Heritage Site. Sika Deer are native to most areas of Japan, from Hokkaido to Yakushima Island of Kyushu, with their numbers having notably increased from 1970 onwards in Shiretoko. On the other hand, Sika Deer are absent from Kunashiri, or at least have not been recorded here until now (Hokkaido Regional Forest Office, Kushiro Branch 2012). The specific objective of the study was to assess the recovery of damaged vegetation under strong browsing pressure by the deer. As a result, a vegetation classification of each locality accompanies our check list. Descriptions of the floristic composition of vegetation was reported, for example, by Tatewaki and Hirano (1936) for *Picea glehnii* forest of Furukamappu (Yuzhno-Kurilsk), and such descriptions are useful for comparison to the floral composition on Kunashiri and Hokkaido. Our check list will also provide a reference on the original flora and vegetation of Shiretoko World Natural Heritage Site before damage by the deer.

MATERIALS AND METHODS

The studied localities are indicated in Figures 1 and 2 and Table 1. All the sites are located in the south part of the island. Their ecological characteristics are as follows:

- 1) Andreevka is located at the Pacific coast, and the plant communities of this locality, including coastal grassland, meadow and coniferous forest, are mostly secondary succession;
- 2) Mount Tomari is characterized by a wider variety of plant communities than other localities, ranging from coastal grassland along the Okhotsk Sea to mountain hardwood and/or coniferous forests around the pass of the Mount Tomari caldera, with volcanic solfataras vegetation (vegetation affected by sulfurous gases of

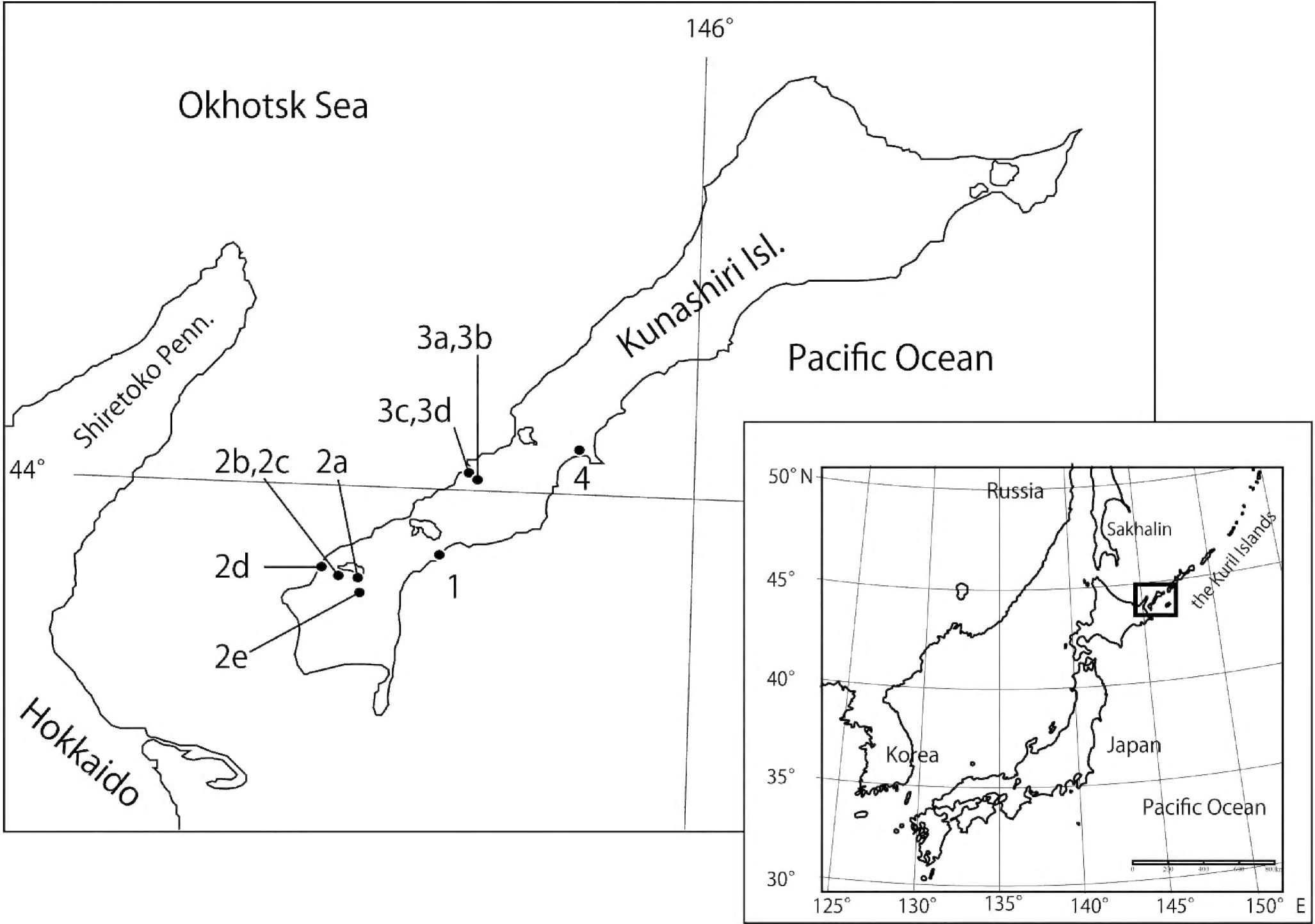


Figure 1. Map of Kunashiri Island with studied localities. The labelled sites correspond to Tables 1 and 2 and Figure 2.

Table 1. Localities, studied during expedition.

| No. | Locality | Date | Latitude | Longitude | alt. (m) |
|-----|---|--------------|------------|-------------|----------|
| 1 | Andreevka S. part of Kunashiri Island, Pacific Ocean coast, on sea terrace between rivers Andreevka and Belkina. | | | | |
| 1a | Coniferous (<i>Abies–Picea</i>) forest at higher part of sea terrace. | 2013/7/19–20 | 43°53′28″N | 145°37′12″E | 20 |
| 1b | Meadow on the lower part of sea terrace. | 2013/7/19 | 43°53′24″N | 145°37′26″E | 15 |
| 1c | On the Pacific Ocean coast of Andreevka. | 2013/7/19 | 43°53′15″N | 145°37′33″E | ~10 |
| 1d | Along the river of river Andreevka, near the mouth. | 2013/7/19 | 43°53′16″N | 145°37′27″E | ~10 |
| 2 | Caldera of Mount Tomari (volcano Golovnina) S. part of Kunashiri Island, from south foot of Caldera to Okhotsk Sea coast. | | | | |
| 2a | Bog at the S. lake side of Lake Ponto (L. Kipyascheye) in Caldera of Mount Tomari. | 2013/7/20 | 43°51′47″N | 145°29′60″E | 140 |
| 2b | Coniferous (<i>Abies–Picea</i>) forest around “Reserve house” of Ozernoye. | 2013/7/21 | 43°52′24″N | 145°28′58″E | 130 |
| 2c | Meadows around “Reserve house” and at lakeside of L. Ichibishinai (L. Goryascheye). | 2013/7/21 | 43°52′23″N | 145°28′56″E | 140 |
| 2d | Okhotsk Sea coast at the mouth of the river Ichibishinai (r. Ozernaya). | 2013/7/21 | 43°53′7″N | 145°27′43″E | ~10 |
| 2e | At mountain pass of the S. edge of Caldera of Mount Tomari. | 2013/7/22 | 43°50′53″N | 145°31′37″E | 320 |
| 2f | Around the center of volcanic activity in Caldera of Mount Tomari. | 2013/7/20 | 43°51′39″N | 145°30′17″E | 150 |
| 3 | Stolbovskyy Ecological Trail S. part of Kunashiri Island, a trail from main road leading to the S. coast (Shimato-kaigan) of the cape Zaimoku-iwa (cape Stolbchatyy) of Okhotsk Sea coast. | | | | |
| 3a | Coniferous (<i>Abies–Picea</i>) forest near the entrance of the trail, mixed forest (with <i>Acer pictum</i> , <i>Quercus crispula</i> , <i>Ulmus davidiana</i> , <i>U. laciniata</i>) near Okhotsk Sea coast. | 2013/7/24 | 44°00′24″N | 145°41′8″E | 50 |
| 3b | Hot spring at riverside, near Okhotsk Sea coast. | 2013/7/24 | 44°00′25″N | 145°41′2″E | 35 |
| 3c | Wet meadow near Okhotsk Sea coast. | 2013/7/24 | 44°00′35″N | 145°40′43″E | ~10 |
| 3d | Coastal meadow at Shimato-kaigan, S of the cape Zaimoku-iwa (cape Stolbchatyy), Okhotsk Sea side. | 2013/7/24 | 44°00′42″N | 145°40′36″E | ~10 |
| 4 | S part of Furukamappu Bog, W of Yuzhno-Kurilsk S (coastal) part of Furukamappu bog, W of Yuzhno-Kurilsk, occurring among <i>Picea glehnii</i> forest. | | | | |
| 4a | Bog with a little pond. | 2013/7/25 | 44°02′14″N | 145°49′12″E | ~10 |
| 4b | <i>Picea glehnii</i> forest. | 2013/7/25 | 44°02′15″N | 145°49′20″E | ~10 |

volcanic area) also developed in and around the caldera;
 3) The common plant communities of Stolbovskyy Ecological Trail are mountain hardwood and/or coniferous forests. In addition to these, coastal grassland is distributed along the Okhotsk Sea and solfataras are also observed in the middle part of the trail;

4) Furukamappu Bog is located in northwest part of Yuzhno-Kurilsk and consists of well preserved bogs dominated by *Sphagnum* spp. *Picea glehnii* forest, one of the most common forests on perhumid (ever-wet) sites in south Kuril and Hokkaido, is also developed in the bog.



Figure 2. Pictures, showing the habitat of every locality. The number and alphabet correspondent to those in Figure 1. **1a:** Andreevka, forest. **1b:** Andreevka, meadow. **1c:** Andreevka, coast. **1d:** Andreevka, river mouth. **2a:** Mount Tomari, lakeside bog. **2b:** Mount Tomari, forest. **2d:** Mount Tomari region, coast near the mouth of Ozernaya River. **2e:** Mount Tomari, at mountain pass. **3a-1:** Stolbovskyy, coniferous forest. **3a-2:** Stolbovskyy, mixed hardwood forest. **3b:** Stolbovskyy, hot spring. **3c:** Stolbovskyy, wet meadow. **3d:** Stolbovskyy, coast. **4a:** Furukamappu, bog. **4b:** Furukamappu, forest.

These localities were surveyed by four authors (all except V. Yu. Barkalov). The study was mainly performed at designated vegetation study sites, but was also conducted along the trail between these sites. On average, time for floral study was one to two hours in each locality. Red data plants were not collected, as far as we could determine. Species names followed Yonekura and Kajita (2003). All collected specimens were identified by the authors, mainly by V. Yu. Barkalov, according to the APGIII system (Yonekura and Murata 2013). Voucher specimens were deposited in Institute of Biology and Soil science, Far Eastern Branch of Russian Academy of Sciences, Vladivostok (VLA), Russia. The second locality, Mount Tomari, is in a protected region and permission was obtained for the purpose of this study from State Natural Reserve “Kurilskiy”. Information on microhabitats, red data plants and other data are indicated in Table 2. Referenced red data books are those of Sakhalin State (2005); Hokkaido Prefecture (2001); Japan (2012) and Russian Federation (2008).

RESULTS

A list of the inventoried plants is shown in Table 2. We identified 384 plant species, including 22 ferns, 5 gymnosperms and 357 angiosperms (Table 2). *Picea-Abies* forests in Kunashiri (1a, 2b, 3a) are very similar to those of Shiretoko or Hokkaido, except for the presence of *Sasa*, which widely covers the forest floor. The composition of coniferous forests was similar to those in Hokkaido, containing plants such as *Cornus canadensis* L., *Maianthemum dilatatum* (A. W. Wood) A. Nelson & J. F. Macbr., *Circaea alpina* L. subsp. *alpina* and others. Along Stolbovskyy Ecological Trail (3a) near the Okhotsk Sea side, we found hardwoods (broadleaved trees) such as *Acer* (*A. pictum* Thunb., *A. ukurunduense* Trautv. & C. A. Mey.), *Quercus crispula* Blume, *Ulmus davidiana* Planch. var. *japonica* (Rehder) Nakai and *U. laciniata* (Trautv.) Mayr. among coniferous trees. *Magnolia obovata* Thunb. and *Quercus dentata* Thunb., red data plants in Russia and Sakhalin district, were also found along Stolbovskyy ecological trail and at Okhotsk Sea coast respectively.

In the caldera of Mount Tomari (2), we found sparse trees of *Picea glehnii* (F.Schmidt) Mast. and *Abies sachalinensis* (F.Schmidt) Mast. Vegetation at the central site of volcanic activity was affected by sulfurous gases, and was surrounded by a thicket of *Pinus pumila* (Pall.) Regel and *Ledum palustre* L. subsp. *diversipilosum* (Nakai) H. Hara var. *nipponicum* Nakai, and plants such as *Empetrum nigrum* L. var. *japonicum* K. Koch, *Fallopia sachalinensis* (F.Schmidt) Ronse Decr. and *Spiraea betulifolia* Pall. var. *betulifolia* were observed. Some unique populations found in the bog at the edge of atrio-lake included those of *Juncus articulatus* L., *J. filiformis* L., *J. haenkei* E. Mey., *Holcus lanatus* L., *Rumex gmelinii* Turcz. ex Ledeb., and *Platanthera tipuloides* (L. fil.) Lindl., amongst others.

In Furukamappu Bog (4a) we found rare plants such as *Pogonia japonica* Rchb. f. and *Eleorchis japonica* (A. Gray) F. Maek., and also many species of *Carex*, which are Red Data list plants in Japan (2012).

DISCUSSION

We observed *Sasa senanensis* (Franch. & Sav.) Rehder and *Sasa nipponica* (Makino) Makino & Shibata largely covering the coniferous forest floor. Along with *Sasa*, forest floors were

sometimes covered with *Dryopteris expansa* (C.Presl) Fraser-Jenk. & Jermy, as also seen in some *Abies-Picea* forest of Shiretoko (e.g., Cape Shiretoko, Teppanbetsu; Samejima *et al.* 1981). Recently, *Sasa* has been reduced in the forests of Shiretoko because of browsing damage by Sika Deer. Along the trail where *Sasa* or *Dryopteris* are rather rare, we noticed plants such as *Adoxa moschatellina* L. (whose level of extinction risk classification has increased due to browsing damage by Sika Deer in Kyoto (Kyoto Prefecture 2013)), *Orthilia secunda* (L.) House, *Carex sachalinensis* F. Schmidt and others. It will be necessary to investigate how these plants grow in the forests of Shiretoko under the browsing pressure of Sika Deer.

The southern Kuril Islands of Kunashiri and Etorofu constitute a distribution limit of some warm to temperate plant elements, which tend to occur along the Okhotsk Sea coast due to warmer climatic conditions than the Pacific coast (Barkalov 2009). Some of these plants are classified as red data plants for Russia and the Sakhalin region. We found *Magnolia obovata* Thunb. and *Quercus dentata* Thunb. in good condition, and *Aralia cordata* and *Hydrangea petiolaris* Siebold & Zucc. were observed several to many times. However, we did not observe *Cercidiphyllum japonicum* Siebold & Zucc. and *Tilia maximowicziana* Shirasawa, which are considered very rare in Kunashiri (Barkalov 2009), although *Cercidiphyllum japonicum* and *Tilia maximowicziana* are common in Shiretoko (Samejima *et al.* 1981). As far as was observed in this study, hardwoods (broadleaved trees) of warm-temperate elements were mainly dispersed among coniferous forests, and their distribution seems to be more limited in Kunashiri than in Shiretoko.

The central site of volcanic activity in the caldera of Mount Tomari was surrounded by thickets of *Pinus pumila* and *Ledum palustre*, with *Empetrum nigrum* L. var. *japonicum* K. Koch and *Spiraea betulifolia* Pall. var. *betulifolia*. Sato (1981) reports the *Miscanthus* community from a new volcano site of Mount Io-zan, Shiretoko, and also observed the occurrence of *Pinus pumila* with *Empetrum nigrum*, despite of the low altitude of the region. Furukamappu Bog is a species-rich sphagnum bog. Though the bog differs from bogs in Shiretoko, occurring among mountains, these sphagnum bogs are widely seen in Hokkaido, and it will be interesting to compare species composition between these bogs.

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Table 2. List of the plants found. Abbreviations (*): B.: Vyacheslav Yu. Barkalov, F.: Tomoko Fukuda, I.: Yukio Ishikawa, Y.: Hiroki Yamagishi; (**): RD(H): Red data book of Hokkaido (2001); RD(J): 4-th revision of Red data list of Japan (2012); RD(R): Red data book of Russian Federation. Plants (2008); RD (S): Red data book of Sakhalin state (2005).

| Family/species names | Japanese name | Locality | Coll. * | Identified by* | Specimen No. for “Kunashiri-2013” | Remarks** |
|--|---------------|----------------|---------|----------------|-----------------------------------|------------------|
| Lycopodiaceae | | | | | | |
| <i>Huperzia serrata</i> (Thunb.) Trevis. | トウゲシバ | 1a | Y | Y | - | |
| | | 1b | Y | Y | 25 | |
| <i>Lycopodium complanatum</i> L. | アスヒカズラ | 2e' | F | I | 59 | |
| Equisetaceae | | | | | | |
| <i>Equisetum arvense</i> L. | スギナ | 2c | Y | B | 64 | |
| | | 3c | Y | Y | - | |
| <i>Equisetum hyemale</i> L. | トクサ | 1a | Y | Y | - | |
| <i>Equisetum palustre</i> L. | イヌスギナ | 4a | Y | Y | - | |
| Osmundaceae | | | | | | |
| <i>Osmunda cinnamomea</i> L. subsp. <i>asiatica</i> (Fernald) Fraser-Jenk. | ヤマドリゼンマイ | 1a | I | I | - | |
| | | 2b, 4a, 4b | Y | Y | - | |
| | | 3d | F | Y | 121 | |
| <i>Osmunda japonica</i> Thunb. | ゼンマイ | 3a | Y | Y | - | |
| Dennstaedtiaceae | | | | | | |
| <i>Pteridium aquilinum</i> (L.) Kuhn subsp. <i>japonicum</i> (Nakai) Á. & D.Löve | ワラビ | 1b | Y | Y | - | |
| | | 2b | Y | Y | - | |
| Pteridaceae | | | | | | |
| <i>Coniogramme intermedia</i> Hieron. | イワガネゼンマイ | 3a | Y | Y | - | RD(S); riverside |
| Thelypteridaceae | | | | | | |
| <i>Thelypteris nipponica</i> (Franch. & Sav.) Ching | ニッコウシダ | 4a | Y | Y | - | |
| <i>Thelypteris palustris</i> (Salisb.) Schott | ヒメシダ | 1a | Y | Y | 3 | |
| | | 4a | F | Y | 148 | |
| <i>Thelypteris phegopteris</i> (L.) Sloss. ex Rydb. | ミヤマワラビ | 1b, 2b, 2e, 3a | Y | Y | - | |
| | | 2e' | F | Y | 89 | |

Continued

Table 2. Continued.

| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|--|-----------------|-----------------------|------------|-------------------|-------------------------------------|---|
| Onocleaceae | | | | | | |
| <i>Matteuccia struthiopteris</i> (L.) Tod. | クサソテツ | 1a | Y | Y | - | |
| | | 3a | I | I | - | |
| <i>Onoclea sensibilis</i> L. var. <i>interrupta</i> Maxim. | コウヤワラビ | 1b | Y | Y | - | |
| Athyriaceae | | | | | | |
| <i>Athyrium brevifrons</i> Nakai ex Tagawa | エゾメシダ | 1b | I | I | - | |
| <i>Athyrium yokoscense</i> (Franch. & Sav.) H.Christ | ヘビノネゴザ | 2b | Y | Y | - | |
| <i>Deparia pterorachis</i> (H.Christ) M.Kato | オオメシダ | 3d | I | I | - | |
| <i>Deparia pycnosora</i> (H.Christ) M.Kato | ミヤマシケシダ | 1a | I | I | - | |
| | | 3a | Y | Y | - | along stream |
| Dryopteridaceae | | | | | | |
| <i>Dryopteris crassirhizoma</i> Nakai | オシダ | 1a | Y | Y | - | |
| | | 2b | Y | Y | - | |
| | | 3a | Y | Y | - | |
| <i>Dryopteris expansa</i> (C.Presl) Fraser-Jenk. & Jermy | シラネワラビ | 1b | Y,I | Y,I | - | |
| | | 3a | Y | Y | - | |
| <i>Polystichum braunii</i> (Spenn.) Fée | ホソイノデ | 3a | Y | Y | - | along stream |
| Polypodiaceae | | | | | | |
| <i>Lepisorus ussuriensis</i> (Regel & Maack) Ching | ウスリーノキシノブ | 1a | Y | B | 31 | |
| | | 1a | Y | Y | - | on the branch of <i>Taxus cuspidata</i> |
| Pinaceae | | | | | | |
| <i>Abies sachalinensis</i> (F.Schmidt) Mast. | トドマツ | 1a, 2b, 3a | Y | Y | - | |
| | | 2f | I | I | - | |
| <i>Picea glehnii</i> (F.Schmidt) Mast. | アカエゾマツ | 3a | Y | Y | - | RD(R), RD(S) |
| | | 3d | F | Y | 130 | |
| <i>Picea jezoensis</i> (Siebold & Zucc.) Carrière | エゾマツ | 2f | I | I | - | |
| | | 1a, 2b, 3a | Y | Y | - | |
| <i>Pinus pumila</i> (Pall.) Regel | ハイマツ | 2f | I | I | - | |
| | | 2b, 2e, 3c | Y | Y | - | |
| | | 2a, 2f | I | I | - | |
| Taxaceae | | | | | | |
| <i>Taxus cuspidata</i> Siebold & Zucc. | イチイ | 1a, 3a | Y | Y | - | RD(R), RD(S) |
| Nymphaeaceae | | | | | | |
| <i>Nuphar pumila</i> (Timm) DC. var. <i>pumila</i> | ネムロコウホネ | 4a | F | Y | 149 | RD(S), RD(J), RD(H) |
| Schisandraceae | | | | | | |
| <i>Schisandra chinensis</i> (Turcz.) Baill. | チョウセンゴミシ | 2d | Y | Y | - | |
| Aristolochiaceae | | | | | | |
| <i>Asarum heterotropoides</i> F.Schmidt | オクエゾサイシン | 1a | Y | Y | - | |
| | | 2e | Y | B | 70 | |
| Magnoliaceae | | | | | | |
| <i>Magnolia obovata</i> Thunb. | ホオノキ | 1a, 2b, 3a | Y | Y | - | RD(R), RD(S) |
| Araceae | | | | | | |
| <i>Arisaema peninsulae</i> Nakai | コウライテンナンシ ョウ | 3a | Y | Y | - | |
| <i>Lysichiton camtschatcense</i> (L.) Schott | ミズバシヨウ | 2c, 4a | Y | Y | - | |
| | | 3a, 3c | I | I | - | |
| Melanthiaceae | | | | | | |
| <i>Paris verticillata</i> M. Bieb. | クルマバツクバネソウ | 3a | I | I | - | |
| <i>Trillium camschatcense</i> Ker Gawl. | オオバナノエンレイ ソウ | 1a, 1b, 3a | Y | Y | - | |
| <i>Veratrum grandiflorum</i> (Maxim. ex Miq.) O.Loes. | バイケイソウ | 1a, 1b, 3a, 3c, 4a | Y | Y | - | <i>Veratrum album</i> L. subsp. <i>oxysepalum</i> (Turcz.) Hultén |
| Liliaceae | | | | | | |
| <i>Cardiocrinum cordatum</i> (Thunb.) Makino var. <i>glehnii</i> (F.Schmidt) H.Hara | オオウバユリ | 3c | Y | Y | - | RD(R) |
| <i>Clintonia udensis</i> Trautv. & C.A.Mey. | ツバメオモト | 1a, 3a | Y | Y | - | |
| <i>Lilium maculatum</i> Thunb. subsp. <i>dauricum</i> (Ker Gawl.) H.Hara | エゾスカシユリ | 3d | Y | Y | - | |
| <i>Lilium medeoloides</i> A.Gray | クルマユリ | 2b, 3a | Y | Y | - | |

Continued

Table 2. Continued.

| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|---|----------------------|-----------------------------------|------------|-------------------|-------------------------------------|----------------------------------|
| Orchidaceae | | | | | | |
| <i>Dactylorhiza aristata</i> (Fisch. ex Lindl.) Soó | ハクサンチドリ | 4a | Y | Y | - | |
| <i>Eleorchis japonica</i> (A.Gray) F.Maek. | サワラン | 4a | Y | Y | - | RD(R), RD(S), RD(H) |
| <i>Epipactis papillosa</i> Franch. & Sav. | エゾスズラン | 1a, 2b, 3a | Y | Y | - | |
| <i>Listera nipponica</i> Makino | ミヤマフタバラン | 3a | I | I | - | RD(H) |
| <i>Myrmechis japonica</i> (Rchb.f.) Rolfe | アリドオシラン | 3a | Y | Y | - | RD(R), RD(H) |
| <i>Platanthera chorisiana</i> (Cham.) Rchb.f. | タカネトンボ (ミヤケ ラン) | 1b, 4a | Y | Y | - | RD(S) |
| <i>Platanthera mandarinorum</i> Rchb.f. subsp. <i>mandarinorum</i> var. <i>oreades</i> (Franch. & Sav.) Koidz. | ヤマサギソウ | 2a | Y | Y | - | |
| <i>Platanthera mandarinorum</i> Rchb.f. subsp. <i>ophrydioides</i> (F.Schmidt) K.Inoue | キソチドリ | 4a | Y | Y | - | |
| <i>Platanthera metabifolia</i> F.Maek. | エゾチドリ | 3d | Y | Y | - | |
| <i>Platanthera sachalinensis</i> F. Schmidt | オオヤマサギソウ | 3d | F | B | 111 | |
| <i>Platanthera tipuloides</i> (L. fil.) Lindl. | ホソバノキソチドリ | 2a | F | B | 38 | |
| | | 4a | F | B | 141 | |
| <i>Pogonia japonica</i> Rchb.f. | トキソウ | 4a | Y | Y | - | RD(R), RD(S), RD(J), RD(H) |
| Iridaceae | | | | | | |
| <i>Iris ensata</i> Thunb. var. <i>spontanea</i> (Makino) Nakai ex Makino & Nemoto | ノハナショウブ | 4a | Y | Y | - | RD(R), RD(S) (for I. ensata) |
| <i>Iris laevigata</i> Fisch. | カキツバタ | 4a | Y | Y | - | RD(J) |
| <i>Iris setosa</i> Pall. ex Link | ヒオウギアヤメ | 1b | Y | Y | 10 | |
| | | 2c, 4a | Y | Y | - | |
| Xanthorrhoeaceae | | | | | | |
| <i>Hemerocallis dumortieri</i> C.Morren var. <i>esculenta</i> (Koidz.) Kitam. ex M.Matsuoka & M.Hotta | ゼンテイカ | 1b, 2e, 4a | I, Y | I, Y | - | |
| <i>Hemerocallis lilioasphodelus</i> L. var. <i>yezoensis</i> (H. Hara) M. Hotta | エゾキスゲ | 2d | Y | Y | - | |
| Amaryllidaceae | | | | | | |
| <i>Allium victorialis</i> L. subsp. <i>platyphyllum</i> Hultén | ギョウジャニンニク | 1a, 2b | Y | Y | - | |
| Asparagaceae | | | | | | |
| <i>Convallaria majalis</i> L. var. <i>manshurica</i> Kom. | スズラン | 3d | Y | Y | - | |
| <i>Hosta sieboldii</i> (Paxton) J.W.Ingram var. <i>rectifolia</i> (Nakai) H.Hara | タチギボウシ | 4a | Y | Y | - | |
| | | 4a | F | F | 132 | |
| <i>Maianthemum dilatatum</i> (A.W.Wood) A.Nelson & J.F.Macbr. | マイヅルソウ | 1a, 1b, 2b, 2d, 2e, 3d, 4a, 4b | Y | Y | - | |
| <i>Polygonatum humile</i> Fisch. ex Maxim. | ヒメイズイ | 3d | Y | Y | - | |
| <i>Polygonatum odoratum</i> (Mill.) Druce var. <i>maximowiczii</i> (F.Schmidt) Koidz. | オオアマドコロ | 1a, 1b, 2b, 3a | Y | Y | - | |
| | | 2d | I | I | - | |
| Juncaceae | | | | | | |
| <i>Juncus articulatus</i> L. | カラフトハナビゼキ ショウ | 2a | F | B | 35 | |
| <i>Juncus decipiens</i> (Buchenau) Nakai | イグサ | 2a | F | B | 30, 43 | |
| | | 4a | F | B | 154 | |
| <i>Juncus ensifolius</i> Wikstr. | ミクリゼキショウ | 2a | Y | Y | - | |
| <i>Juncus filiformis</i> L. | エゾホソイ | 2a | F | B | 39 | |
| <i>Juncus haenkei</i> E. Mey. | ハマイ | 2a | F | B | 40 | |
| <i>Juncus prominens</i> (Buchenau) Miyabe & Kudo | セキショウイ | 4a | F | B | 151 | RD(J) |
| <i>Juncus tenuis</i> Willd. | クサイ | 3c | F | Y | - | |
| <i>Luzula capitata</i> (Miq.) Miq. ex Kom. | スズメノヤリ | 2c | Y | F | 65 | |
| | | 2d | Y | Y | - | |
| | | 3d | F | F | 122 | |
| Cyperaceae | | | | | | |
| <i>Carex canescens</i> L. | ハクサンスゲ | 2c | I | F | 73 | |
| <i>Carex caryophyllea</i> Latour. var. <i>microtricha</i> (Franch.) Kuk. | チャシバスゲ | 3d | F, I | I | 90 | |
| | | 1b | F | B | 6 | |
| | | 4a | F | B | 158 | |
| <i>Carex diandra</i> Schrank | クリイロスゲ | 4a | F | F | 135 | RD(J), RD(H) |
| <i>Carex falcata</i> Turcz. | サヤスゲ | 4a | F | B | 161 | RD(J) |
| <i>Carex foliosissima</i> F. Schmidt | オクノカンスゲ | 1b | F | B | 17 | |
| <i>Carex kobomugi</i> Ohwi | コウボウムギ | 3d | Y | Y | - | |

Continued

Table 2. Continued.

| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|--|----------------|------------|------------|-------------------|-------------------------------------|-----------------------|
| <i>Carex lasiocarpa</i> Ehrh. subsp. <i>occultans</i> (Franch.) Hulten | ムジナスゲ | 4a | F | B | 134 | |
| | | 4a | F | B | 136 | |
| | | 4a | F | B | 138 | |
| <i>Carex limosa</i> L. | ヤチスゲ | 4a | F | B | 139 | |
| <i>Carex lyngbyei</i> Hornem. | ヤラメスゲ | 2a | F | F | 41 | |
| | | 2c | F | F | 42 | |
| <i>Carex maximowiczii</i> Miq. | ゴウソ | 4a | F | B | 160 | |
| <i>Carex michauxiana</i> Boeck. subsp. <i>asiatica</i> Hultén | ミタケスゲ | 4a | F | F | 147 | |
| <i>Carex middendorffii</i> F. Schmidt | トマリスゲ | 4a | F | F | 140a | |
| <i>Carex mollicula</i> Boott | ヒメシラスゲ | 3a | F | F | 103 | along ecological road |
| | | 3a, 2b | Y, I | Y, I | - | at riverside |
| <i>Carex nemurensis</i> Franch. | ホソバオゼヌマスゲ | 4a | Y | Y | - | RD(J) |
| <i>Carex omiana</i> Franch. & Sav. var. <i>omiana</i> | ヤチカワズスゲ | 4a | F | F | 152 | |
| <i>Carex pauciflora</i> Lightf. | タカネハリスゲ | 4a | F | F | 145 | RD(J) |
| <i>Carex pseudololiacea</i> F. Schmidt | ヒロハイッポンスゲ | 4a | F | B | 153 | RD(J) |
| | | 4a | F | B | 156 | |
| | | 4b | Y | Y | - | |
| <i>Carex rhynchophysa</i> C.A. Mey. | オオカサスゲ | 2c | F | B | 57 | |
| <i>Carex sachalinensis</i> F. Schmidt | サハリンイトスゲ | 1a | I | B | 2 | |
| | | 3a | F | B | 101 | |
| <i>Carex sachalinensis</i> F.Schmidt var. <i>iwakiana</i> Ohwi | ゴンゲンスゲ | 3a | I | I | - | |
| <i>Carex thunbergii</i> Steud. | アゼスゲ | 4a | F | B | 140b | |
| <i>Carex traiziscana</i> F. Schmidt | ヒロハオゼヌマスゲ | 4a | F | F | 155 | RD(J) |
| <i>Carex tsuishikarensis</i> Koidz. & Ohwi | ホロムイクグ | 4a | F | B | 146 | RD(J), RD(H) |
| <i>Eriophorum gracile</i> K.Koch | サギスゲ | 4a | F | F | 133 | |
| <i>Eriophorum vaginatum</i> L. subsp. <i>fauriei</i> (E.G.Camus) A. & D.Löve | ワタスゲ | 4a | F | F | 137 | |
| <i>Fimbristylis subbispicata</i> Nees & Meyen | ヤマイ | 3b | F | B | 96 | |
| <i>Rhynchospora alba</i> (L.) Vahl | ミカヅキグサ | 4a | F | F | 142 | |
| <i>Schoenoplectus hotarui</i> (Ohwi) Holub | ホタルイ | 2a | Y | Y | - | |
| <i>Scirpus wichurae</i> Boeck. | アブラガヤ | 2c | F | F | 55 | |
| Poaceae | | | | | | |
| <i>Agrostis capillaris</i> L. (A. <i>tenuis</i> Sibth.) | イトコヌカグサ | 1b | F | B | 7 | |
| | | 2c | Y | B | 63 | |
| <i>Agrostis flaccida</i> Hack. | ミヤマヌカボ | 2e, 2f | I | I | - | |
| <i>Agrostis gigantea</i> Roth | コヌカグサ | 2c | Y | B | 60 | |
| | | 3b | F | B | 95 | |
| <i>Anthoxanthum odoratum</i> L. | ハルガヤ | 1b, 3c | I | I | - | |
| <i>Avenella flexuosa</i> (L.) Drej. (<i>Deschampsia flexuosa</i> (L.) Nees) | コメススキ | 2a | F, I | B | 32 | |
| | | 2f | I | I | - | |
| <i>Beckmannia syzigachne</i> (Steud.) Fernald | カズノコグサ | 1d | Y | Y | - | |
| <i>Brachypodium kurilense</i> (Probat.) Probat. | ヤマカモジグサ | 2c | F | B | 44 | |
| <i>Brylkinia caudata</i> (Munro ex A.Gray) F.Schmidt | ホガエリガヤ | 1a | Y | Y | - | |
| | | 3a | F | Y | 104 | |
| <i>Calamagrostis epigeios</i> (L.) Roth | ヤマアワ | 2d | I | I | - | |
| <i>Calamagrostis hakonensis</i> Franch. & Sav. | ヒメノガリヤス | 3a | I | I | - | |
| <i>Calamagrostis purpurea</i> (Trin.) Trin. | イワノガリヤス | 2c | F | B | 34 | |
| | | 2d | I | B | 45 | |
| | | 2e | I | I | - | |
| <i>Calamagrostis sachalinensis</i> F.Schmidt | タカネノガリヤス | 2e | I | I | - | |
| <i>Dactylis glomerata</i> L. | カモガヤ | 1b | Y | Y | - | |
| | | 3d | F | F | 110 | |
| <i>Festuca rubra</i> L. | オオウシノケグサ | 1b | F | B | 4 | |
| | | 2e | I | I | - | |
| <i>Holcus lanatus</i> L. | シラゲガヤ | 2a | F | B | 29 | |
| | | 2a | F | B | 33 | |
| <i>Leymus mollis</i> (Trin. ex Spreng.) Pilg. | テンキグサ | 1c, 2d, 3d | Y | Y | - | |
| <i>Miscanthus sinensis</i> Andersson | ススキ | 2d, 3d | I | I | - | |
| <i>Phalaris arundinacea</i> L. | クサヨシ | 2c, 3c | Y | Y | - | bogs/riverside |
| <i>Phleum pratense</i> L. | オオアワガエリ | 1b, 3c | Y | Y | - | |

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| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|---|------------------|---------------------------|------------|-------------------|-------------------------------------|-----------------------|
| <i>Phragmites australis</i> (Cav.) Trin. ex Steud. | ヨシ | 1b, 1d, 2c, 3c | Y | Y | - | bogs/riverside |
| <i>Poa annua</i> L. | スズメノカタビラ | 3b | F | B | 94 | |
| <i>Sasa kurilensis</i> (Rupr.) Makino & Shibata | チシマザサ | 1a, 2d, 2e | I | I | - | |
| <i>Sasa nipponica</i> (Makino) Makino & Shibata | ミヤコザサ | 1a | F | I | 8 | |
| <i>Sasa senanensis</i> (Franch. & Sav.) Rehder | クマイザサ | 1a, 1b, 2b, 2e, 3a | Y, I | Y, I | - | |
| Ranunculaceae | | | | | | |
| <i>Aconitum maximum</i> Pall. ex. DC. | トリカブト属 | 1a, 3a | Y | Y | - | |
| <i>Actaea erythrocarpa</i> Fisch. | アカミノルイヨウシ ヨウマ | 1a, 3a | Y | Y | - | |
| <i>Anemone debilis</i> Fisch. ex Turcz. | ヒメイチゲ | 1a | I | I | - | |
| | | 2e, 4a | Y | Y | - | |
| <i>Aquilegia flabellata</i> Siebold & Zucc. var. <i>pumila</i> (Huth) Kudô | ミヤマオダマキ | 2d | Y | Y | - | |
| <i>Cimicifuga simplex</i> (DC.) Wormsk. ex Turcz. | サラシナショウマ | 1a, 3a | Y | Y | - | |
| <i>Coptis trifolia</i> (L.) Salisb. | ミツバオウレン | 2e | Y | Y | 68 | |
| | | 4a | F | F | 144 | |
| <i>Ranunculus grandis</i> Honda var. <i>austrokurilensis</i> (Tatew.) H.Hara | シコタンキンボウゲ | 1b | Y | Y | 1 | RD(J) |
| | | 3a | Y | Y | - | |
| | | 3d | F | B | 126 | |
| <i>Ranunculus silerifolius</i> H.Lév. var. <i>glaber</i> (H.Boissieu) Tamura | キツネノボタン | 2b, 3a | Y | Y | - | riverside |
| <i>Thalictrum</i> sp. | カラマツソウ属 | 1b, 3a | Y | Y | - | |
| <i>Thalictrum baicalense</i> Turcz. ex Ledeb. | ハルカラマツ | 1b | Y | Y | - | |
| <i>Thalictrum minus</i> L. var. <i>hypoleucum</i> (Siebold & Zucc.) Miq. | アキカラマツ | 2d | Y | Y | - | |
| <i>Thalictrum sachalinense</i> Lecoy. | エゾカラマツ | 1a, 1b, 2b, 4a | Y | Y | - | |
| | | 3d | F | Y | 107 | |
| Grossulariaceae | | | | | | |
| <i>Ribes latifolium</i> Jancz. | エゾスグリ | 1a | Y | Y | 49 | |
| <i>Ribes rubrum</i> L. | フサスグリ | 2c | Y | Y | - | Cult. ? |
| Saxifragaceae | | | | | | |
| <i>Astilbe odontophylla</i> Miq. | トリアシショウマ | 4a | Y | Y | - | |
| <i>Chrysosplenium kamtschaticum</i> Fisch. ex Ser. | チシマネコノメソウ | 1b, d, 2b, 3a | Y | Y | - | 2b, 3a: along streams |
| <i>Saxifraga fusca</i> Maxim. var. <i>kurilensis</i> Ohwi | チシマクロクモソウ | 1d | F | F | 26-28 | |
| | | | F | F | 82-85 | |
| | | 1a, 3a | Y | Y | - | 3a: along streams |
| Crassulaceae | | | | | | |
| <i>Phedimus kamtschaticus</i> (Fisch.)’t Hart | エゾノキリンソウ | 1c, 2d | Y | Y | - | |
| Vitaceae | | | | | | |
| <i>Vitis coignetiae</i> Pulliat ex Planch. | ヤマブドウ | 2b, 3a | Y | Y | - | |
| Fabaceae | | | | | | |
| <i>Lathyrus japonicus</i> Willd. | ハマエンドウ | 1c, 2d, 3d | Y | Y | - | |
| | | 3d | F | F | 109 | |
| <i>Lathyrus palustris</i> L. var. <i>pilosus</i> (Cham.) Ledeb. | エゾノレンリソウ | 4a | F | Y | 143 | |
| | | 3c | Y | Y | - | bogs/riverside |
| <i>Thermopsis lupinoides</i> (L.) Link | センダイハギ | 1b, 2d, 2c, 3d | Y | Y | - | |
| <i>Trifolium pratense</i> L. | ムラサキツメクサ | 2c, 3c | Y | Y | - | |
| <i>Trifolium repens</i> L. | シロツメクサ | 1b, 2c, 2d, 3c | Y | Y | - | |
| <i>Vicia cracca</i> L. | クサフジ | 2d, 3c | Y | Y | - | |
| <i>Vicia japonica</i> A.Gray | ヒロハクサフジ | 2d | I | I | - | |
| <i>Vicia unijuga</i> A.Braun | ナンテンハギ | 1b | I | I | - | |
| | | 3d | F | Y | 105 | |
| Rosaceae | | | | | | |
| <i>Agrimonia pilosa</i> Ledeb. | キンミズヒキ | 3a | I | I | - | |
| <i>Aruncus dioicus</i> (Walter) Fernald var. <i>kamtschaticus</i> (Maxim.) H.Hara | ヤマブキショウマ | 1b, 1c, 2d, 2e, 3c, 3d | Y, I | Y, I | - | |
| <i>Cerasus maximowiczii</i> (Rupr.) Kom. | ミヤマザクラ | 2b | Y | Y | - | |
| | | 2e’ | F | Y | 88 | |
| <i>Cerasus nipponica</i> (Matsum.) Ohle ex H.Ohba var. <i>nipponica</i> | タカネザクラ | 2e | F | B | 77, 81 | |

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| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|--|-----------------|-------------------------------|------------|-------------------|-------------------------------------|----------------------|
| <i>Comarum palustre</i> L. | クロバナロウゲ | 4a | Y | Y | - | |
| <i>Filipendula camtschatica</i> (Pall.) Maxim. | オニシモツケ | 1a, 1b, 1c, 2d, 3a, 3c, 4a | Y | Y | - | |
| <i>Geum aleppicum</i> Jacq. | オオダイコンソウ | 1b | F | Y | 21 | |
| | | 2c, 3c | Y | Y | - | |
| <i>Geum macrophyllum</i> Willd. var. <i>sachalinense</i> (Koidz.) H.Hara | カラフトダイコンソウ | 1b | F | Y | 12, 23 | |
| | | 1b, 2c, 3a, 3c | Y | Y | - | |
| <i>Padus ssiori</i> (F.Schmidt) C.K.Schneid. | シウリザクラ | 3a | I | I | - | RD(S) |
| <i>Potentilla fragarioides</i> L. var. <i>major</i> Maxim | キジムシロ | 1b | Y | Y | - | |
| <i>Potentilla fragiformis</i> Willd. ex D.F.K.Schltl. subsp. <i>megalantha</i> (Takeda) Hultén | チシマキンバイ | 2d | Y | Y | - | |
| <i>Potentilla stolonifera</i> Lehm. ex Ledeb. | ツルキジムシロ | 3d | F | F | 112, 131 | |
| <i>Rosa</i> sp. | | 2b, 2c | Y | Y | - | |
| <i>Rosa rugosa</i> Thunb. | ハマナス | 1b, 3d | Y | Y | - | |
| | | 2c | Y | Y | 66 | |
| <i>Rubus idaeus</i> L. subsp. <i>melanolasius</i> Focke | エゾイチゴ | 1a, 1b | I | I | - | |
| | | 1b | Y, F | B, Y | 9, 25 | |
| <i>Rubus phoenicolasius</i> Maxim. | エビガライチゴ | 1b | F | Y | 15 | |
| | | 2e, 3c | Y | Y | - | |
| <i>Rubus triphyllus</i> Thunb. | | 3d | F | B | 117 | |
| <i>Sanguisorba tenuifolia</i> Fisch. ex Link | ナガボノシロワレモ コウ | 2c, 2d, 2e, 3c, 4a | Y | Y | - | |
| | | 1b | I | I | - | |
| | | 3d | F | F | 123 | |
| <i>Sieversia pentapetala</i> (L.) Greene | チングルマ | 4a | F | F | 159 | |
| <i>Sorbus commixta</i> Hedl | ナナカマド | 1a, 2b, 3a, 4a | Y | Y | - | |
| <i>Sorbus sambucifolia</i> (Cham. & Schltl.) M.Roem. | タカネナナカマド | 3d | Y | Y | - | |
| | | 2e | I | I | - | |
| <i>Spiraea betulifolia</i> Pall. var. <i>betulifolia</i> | マルバシモツケ | 2a | I | F | 72 | |
| | | 2e, 2f | Y | Y | - | |
| Ulmaceae | | | | | | |
| <i>Ulmus davidiana</i> Planch. var. <i>japonica</i> (Rehder) Nakai | ハルニレ | 1a, 3a | Y | Y | - | |
| <i>Ulmus laciniata</i> (Trautv.) Mayr | オヒヨウ | 3a, 2b | Y | Y | - | |
| Urticaceae | | | | | | |
| <i>Laportea bulbifera</i> (Siebold & Zucc.) Wedd. | ムカゴイラクサ | 3a | I | I | - | |
| <i>Laportea</i> sp. | イラクサ属 | 3a | Y | Y | - | |
| <i>Pilea pumila</i> (L.) A.Gray | アオミズ | 3b | Y | Y | - | hot spring |
| <i>Urtica platyphylla</i> Wedd. | エゾイラクサ | 1a, 2d, 3a | Y, I | Y, I | - | |
| Fagaceae | | | | | | |
| <i>Quercus crispula</i> Blume | ミズナラ | 1a, 2b, 3a | Y, I | Y, I | - | |
| <i>Quercus dentata</i> Thunb. | カシワ | 2d | I | I | - | RD(R), RD(S) |
| Myricaceae | | | | | | |
| <i>Myrica gale</i> L. var. <i>tomentosa</i> C.DC. | ヤチヤナギ | 4a | Y | Y | - | RD(R) (for M. gale) |
| Betulaceae | | | | | | |
| <i>Alnus hirsuta</i> (Spach) Turcz. ex Rupr. var. <i>hirsuta</i> | ケヤマハンノキ | 2b, 3a, 4a | Y | Y | - | |
| <i>Alnus hirsuta</i> (Spach) Turcz. ex Rupr. var. <i>sibirica</i> (Spach) C.K.Schneid. | ヤマハンノキ | 1a | Y | Y | - | |
| <i>Alnus japonica</i> (Thunb.) Steud. | ハンノキ | 4a | Y | Y | - | |
| <i>Alnus viridis</i> (Chaix) Lam. & DC. subsp. <i>maximowiczii</i> (Callier) D.Löve | ミヤマハンノキ | 2a, 2b, 2d, 2e, 2f | Y, I | Y, I | - | |
| <i>Betula ermanii</i> Cham. | ダケカンバ | 1a, 2b, 3a | Y, I | Y, I | - | |
| | | 2f | I | I | - | |
| <i>Betula platyphylla</i> Sukaczew var. <i>japonica</i> (Miq.) H.Hara | シラカンバ | 1a, 2b, 3a | Y | Y | - | |
| Cucurbitaceae | | | | | | |
| <i>Schizopepon bryoniifolius</i> Maxim. | ミヤマニガウリ | 3a | Y | Y | - | |
| Celastraceae | | | | | | |
| <i>Celastrus orbiculatus</i> Thunb. var. <i>orbiculatus</i> | ツルウメモドキ | 1b | F | I | 18 | |
| | | 2b, 2d, 3d | Y, I | Y, I | - | |
| | | 3d | F | F | 115 | |

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Table 2. Continued.

| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|--|----------------|----------------|------------|-------------------|-------------------------------------|--|
| <i>Euonymus macropterus</i> Rupr. | ヒロハノツリバナ | 1b | Y | B | 25 | |
| | | 1a, 2b, 3a | Y | Y | - | |
| <i>Euonymus planipes</i> (Koehne) Koehne | オオツリバナ | 2b | Y | Y | - | |
| <i>Parnassia palustris</i> L. var. <i>palustris</i> | ウメバチソウ | 4a | Y | Y | 162 | |
| Oxalidaceae | | | | | | |
| <i>Oxalis acetosella</i> L. | コミヤマカタバミ | 1a, 3a, 4b | Y | Y | - | |
| Salicaceae | | | | | | |
| <i>Salix caprea</i> L. | バッコヤナギ | 2b, 3a | Y | Y | - | |
| <i>Salix udensis</i> Trautv. & C.A.Mey. | オノエヤナギ | 2b, c | Y | Y | - | |
| Violaceae | | | | | | |
| <i>Viola grypoceras</i> A.Gray var. <i>grypoceras</i> | タチツボスミレ | 1a | Y | Y | - | |
| <i>Viola hultenii</i> W.Becker | チシマウスバスミレ | 4a | Y | Y | - | RD(J) |
| <i>Viola langsдорffii</i> Fisch. ex DC. subsp. <i>sachalinensis</i> W.Becker | オオバタチツボスミレ | 1b | Y | Y | 19 | RD(J) |
| | | 4a | Y | Y | - | |
| <i>Viola mandshurica</i> W.Becker | スミレ | 1b | Y | Y | - | |
| <i>Viola selkirkii</i> Pursh ex Goldie | ミヤマスミレ | 1a | Y | Y | 48 | |
| | | 2b, 3a, 4b | Y, I | Y, I | - | |
| <i>Viola verecunda</i> A.Gray | ツボスミレ | 1a, 2b, 3a | Y, I | Y, I | - | |
| | | 1b | Y | Y | 22 | |
| | | 2c | F | Y | 56 | |
| Hypericaceae | | | | | | |
| <i>Hypericum erectum</i> Thunb. | オトギリソウ | 1b | Y | B | 20 | |
| | | 2e | F | Y | 79 | |
| | | 2c, 3a | Y | Y | - | |
| Geraniaceae | | | | | | |
| <i>Geranium erianthum</i> DC. | チシマフウロ | 1b, 2d, 2e | Y | Y | - | |
| <i>Geranium thunbergii</i> Siebold ex Lindl. & Paxton | ゲンノショウコ | 1b, 2c | Y | Y | - | |
| <i>Geranium yesoense</i> Franch. & Sav. var. <i>yesoense</i> | エゾフウロ | 1a, 2d, 4a | Y | Y | - | |
| | | 1b | Y | Y | 11 | |
| | | 3d | F | Y | 106 | |
| Lythraceae | | | | | | |
| <i>Lythrum salicaria</i> L. | エゾミソハギ | 3c | Y | Y | - | riverside |
| Onagraceae | | | | | | |
| <i>Chamerion angustifolium</i> (L.) Holub | ヤナギラン | 2e | Y | Y | - | |
| <i>Circaea alpina</i> L. subsp. <i>alpina</i> | ミヤマタニタデ | 1a | I | I | - | |
| <i>Circaea</i> x <i>sterilis</i> Boufford | ヤマタニタデ | 3a | Y | Y | - | riverside |
| <i>Epilobium amurense</i> Hausskn. | ケゴンアカバナ | 1b, d | Y | Y | - | |
| <i>Epilobium amurense</i> Hausskn. subsp. <i>cephalostigma</i> (Hausskn.) C.J.Chen, Hoch & P.H.Raven | イワアカバナ | 2d | Y | Y | - | syn. <i>Epilobium cepha- lostigma</i> Hausskn. |
| | | 1b | F | B | 13 | |
| Anacardiaceae | | | | | | |
| <i>Toxicodendron radicans</i> (L.) Kuntze subsp. <i>orientale</i> (Greene) Gillis | ツタウルシ | 1a, 2b, 3a, 4b | Y, I | Y, I | - | |
| <i>Toxicodendron trichocarpum</i> (Miq.) Kuntze | ヤマウルシ | 2b | Y | Y | - | |
| Sapindaceae | | | | | | |
| <i>Acer pictum</i> Thunb. | イタヤカエデ | 2b, 2d, 3a | Y, I | Y, I | - | |
| <i>Acer ukurunduense</i> Trautv. & C.A.Mey. | オガラバナ | 2b, 3a, 4b | Y | Y | - | |
| Rutaceae | | | | | | |
| <i>Phellodendron amurense</i> Rupr. | キハダ | 2b, 3a | I, Y | I, Y | - | RD(S) |
| <i>Skimmia japonica</i> Thunb. var. <i>intermedia</i> Komatsu f. <i>repens</i> (Nakai) Ohwi | ツルミヤマシキミ | 2b | F | F | 58 | |
| | | 3a, 4b | Y, F | Y, F | - | |
| Brassicaceae | | | | | | |
| <i>Arabis stelleri</i> DC. var. <i>japonica</i> (A.Gray) F. Schmidt | ハマハタザオ | 3d | F | F | 127 | |
| <i>Barbarea orthoceras</i> Ledeb. | ヤマガラシ | 3d | Y | Y | - | |
| <i>Cakile edentula</i> (Bigelow) Hook. | オニハマダイコン | 3d | Y | Y | - | |
| <i>Cardamine leucantha</i> (Tausch) O.E.Schulz | コンロンソウ | 2b | Y | Y | - | |
| | | 3a | F | Y | 97 | riverside |
| <i>Cardamine scutata</i> Thunb. | タネツケバナ | 2d, 3c | Y | Y | - | riverside |
| <i>Draba borealis</i> DC. | エゾイヌナズナ | 2d | Y | Y | - | |
| <i>Nasturtium officinale</i> R.Br. | オランダガラシ | 3c | Y | Y | - | riverside |

Continued

Table 2. Continued.

| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|---|----------------|--|------------|-------------------|-------------------------------------|-----------------------|
| Polygonaceae | | | | | | |
| <i>Fallopia sachalinensis</i> (F.Schmidt) Ronse Decr. | オオイタドリ | 1b, 1c, 1d, 2d, 2c, 3c, 3d | Y | Y | - | |
| <i>Persicaria lapathifolia</i> (L.) Delarbre var. <i>incana</i> (Roth) H.Hara | サナエタデ | 1b | Y | Y | - | |
| <i>Persicaria posumbu</i> (Buch.-Ham. ex D.Don) H.Gross | ハナタデ | 1b, 3d | Y | Y | - | |
| | | 3c | F | Y | 92 | |
| <i>Persicaria thunbergii</i> (Siebold & Zucc.) H.Gross | ミゾソバ | 1a, 1b, 2b, 3c | Y | Y | - | 2b, 3c: along streams |
| <i>Polygonum aviculare</i> L. subsp. <i>aviculare</i> | ミチヤナギ | 1b | Y | Y | - | |
| <i>Rumex acetosella</i> L. subsp. <i>pyrenaicus</i> (Pourret ex Lapeyr.) Akeroyd | ヒメスイバ | 3d | Y | Y | - | |
| <i>Rumex alpestris</i> Jacq. subsp. <i>lapponicus</i> (Hiitonen) Jalas | タカネスイバ | 1b | F, I | Y | 16 | |
| | | 2d, 3d | Y, I | Y, I | - | |
| <i>Rumex gmelinii</i> Turcz. ex Ledeb. | カラフトノダイオウ | 2a | F | B | 37 | RD(J) |
| <i>Rumex obtusifolius</i> L. | エゾノギシギシ | 1b | Y | Y | - | |
| <i>Rumex</i> sp. | スイバ属 | 3d | Y | Y | - | |
| Droseraceae | | | | | | |
| <i>Drosera rotundifolia</i> L. | モウセンゴケ | 2a, 2e, 4a | Y | Y | - | |
| Caryophyllaceae | | | | | | |
| <i>Arenaria lateriflora</i> L. | オオヤマフスマ | 1b | F | Y | 14 | |
| | | 3a, d | Y | Y | - | |
| <i>Cerastium fischerianum</i> Ser. | オオバナノミミナグサ | 1c, 3d | Y, I | Y, I | - | |
| <i>Cerastium fontanum</i> Baumg. subsp. <i>vulgare</i> (Hartm.) Greuter & Burdet | オオミミナグサ | 3c | Y | Y | - | |
| <i>Dianthus superbus</i> L. var. <i>longicalycinus</i> (Maxim.) F.N.Williams | カワラナデシコ | 2d | Y | Y | - | |
| <i>Honckenya peplodes</i> (L.) Ehrh. var. <i>major</i> Hook. | ハマハコベ | 1c, 3d | Y | Y | - | |
| <i>Sagina japonica</i> (Sw.) Ohwi | ツメクサ | 3d | Y | Y | - | |
| <i>Stellaria bungeana</i> Fenzl var. <i>stuebendorffii</i> (Regel) Y.C.Chu | オオハコベ | 1b | Y | Y | - | |
| <i>Stellaria fenzlii</i> Regel | シラオイハコベ | 1a | F, Y | B | 47, 50 | |
| <i>Stellaria graminea</i> L. | カラフトホソバハコベ | 4' | F | B | 86 | |
| <i>Stellaria radians</i> L. | エゾオオヤマハコベ | 1b | Y | Y | - | |
| | | 3c | Y | B | 91 | |
| Amaranthaceae | | | | | | |
| <i>Chenopodium album</i> L. | シロザ | 1b | Y | Y | - | |
| <i>Salsola komarovii</i> Iljin | オカヒジキ | 1c, 3d | Y | Y | - | |
| Cornaceae | | | | | | |
| <i>Cornus canadensis</i> L. | ゴゼンタチバナ | 2b, 2e, 3a, 4a, 4b | Y | Y | - | |
| <i>Cornus controversa</i> Hemsl. ex Prain | ミズキ | 2b | Y | Y | - | |
| Hydrangeaceae | | | | | | |
| <i>Hydrangea paniculata</i> Siebold | ノリウツギ | 1a, 1b, 2a, 2b, 2e, 3a, 3c, 3d, 4a | Y | Y | - | |
| <i>Hydrangea petiolaris</i> Siebold & Zucc. | ツルアジサイ | 1a, 2b | Y | Y | - | RD(R), RD(S) |
| | | 2e' | F | Y | 87 | |
| <i>Schizophragma hydrangeoides</i> Siebold & Zucc. | イワガラミ | 1a, 2b, 3a | Y | Y | - | RD(R), RD(S) |
| Balsaminaceae | | | | | | |
| <i>Impatiens noli-tangere</i> L. | キツリフネ | 1a, 2b, 3a | Y | Y | - | 3a: along streams |
| Polemoniaceae | | | | | | |
| <i>Polemonium schizanthum</i> Klok. (<i>P. laxiflorum</i> (Regel) Kitam., p.p.) | ハナシノブ属 | 2c | Y | B | 63 | |
| | | 4a | Y | Y | 163 | |
| Primulaceae | | | | | | |
| <i>Lysimachia vulgaris</i> L. var. <i>davurica</i> (Ledeb.) R.Knuth | クサレダマ | 4a | Y | Y | - | |
| <i>Trientalis europaea</i> L. | ツマトリソウ | 4a | Y | Y | - | |
| Actinidiaceae | | | | | | |
| <i>Actinidia arguta</i> (Siebold & Zucc.) Planch. ex Miq. f. <i>platyphylla</i> (A.Gray ex Miq.) H.Ohba | コクワ | 1a, 2b, 3a | Y | Y | - | RD(S) |
| <i>Actinidia kolomikta</i> (Maxim. & Rupr.) Maxim. | ミヤママタタビ | 2b, 3a | Y | Y | - | |
| | | 2e' | F | F | 75 | |

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|--|----------------|----------------|------------|-------------------|-------------------------------------|-------------------|
| Ericaceae | | | | | | |
| <i>Empetrum nigrum</i> L. var. <i>japonicum</i> K. Koch | ガンコウラン | 2e, 3d, 4a | Y | Y | - | |
| | | 2f | I | I | - | |
| <i>Eubotryoides grayana</i> (Maxim.) H.Hara var. <i>grayana</i> | ハナヒリノキ | 2b | Y | Y | - | |
| | | 2e | Y | B | 69 | |
| <i>Ledum palustre</i> L. subsp. <i>diversipilosum</i> (Nakai) H.Hara var. <i>nipponicum</i> Nakai | イソツツジ | 2e, 2f, 3d, 4a | Y | Y | - | |
| <i>Menziesia pentandra</i> Maxim. | コヨウラクツツジ | 2b | F | B | 54 | |
| <i>Monotropastrum humile</i> (D.Don) H.Hara | ギンリョウソウ | 1a, 3a | Y | Y | - | |
| <i>Orthilia secunda</i> (L.) House | コイチャクソウ | 3a | F | F | 98 | |
| <i>Pyrola japonica</i> Klenze ex Alefeld | イチャクソウ | 3a | Y | Y | - | |
| <i>Pyrola renifolia</i> Maxim. | ジンヨウイチャクソウ | 3a | Y | Y | - | |
| <i>Rhododendron tschonoskii</i> Maxim. | コメツツジ | 2e | F | Y | 36 | RD(R), RD(S) |
| <i>Vaccinium oxycoccos</i> L. | ツルコケモモ | 4a | Y | Y | - | |
| <i>Vaccinium praestans</i> Lamb. | イワツツジ | 2d, 2e, 4b | Y | Y | - | |
| <i>Vaccinium smallii</i> A.Gray var. <i>smallii</i> | オオバスノキ | 3d, 4b | Y | Y | - | |
| <i>Vaccinium vitis-idaea</i> L. | コケモモ | 2e | Y | Y | - | |
| Rubiaceae | | | | | | |
| <i>Galium kamtschaticum</i> Steller ex Roem. & Schult. var. <i>kamtschaticum</i> | エゾノヨツバムグラ | 1a | Y | Y | 5 | |
| <i>Galium odoratum</i> (L.) Scop. | クルマバソウ | 1a | Y | Y | - | |
| <i>Galium pseudoasprellum</i> Makino | オオバノヤエムグラ | 1b | Y | Y | - | |
| <i>Galium trifidum</i> L. | ホソバノヨツバムグラ | 4a | F | Y | 150 | |
| <i>Galium trifloriforme</i> Kom. | オククルマムグラ | 1a | Y | Y | - | |
| <i>Galium triflorum</i> Michx. | ヤツガタケムグラ | 1a | F | B | 46 | RD(J) |
| <i>Galium verum</i> L. subsp. <i>asiaticum</i> (Nakai) T.Yamaz. | キバナノカワラマツバ | 1b, c, 2d | Y | Y | - | |
| | | 3d | F | F | 119 | |
| <i>Rubia jesoensis</i> (Miq.) Miyabe & T.Miyake | アカネムグラ | 3d | F | Y | 129 | |
| Genitianeae | | | | | | |
| <i>Gentiana triflora</i> Pall. var. <i>japonica</i> (Kusn.) H.Hara | エゾリンドウ | 2c | Y | Y | - | |
| <i>Swertia tetrapetala</i> Pall. subsp. <i>tetrapetala</i> var. <i>tetrapetala</i> | チシマセンブリ | 2d | Y | Y | - | |
| | | 2e | I | F | 76 | |
| Apocynaceae | | | | | | |
| <i>Metaplexis japonica</i> (Thunb.) Makino | ガガイモ | 3d | Y | Y | - | |
| Boraginaceae | | | | | | |
| <i>Mertensia maritima</i> (L.) Gray subsp. <i>asiatica</i> Takeda | ハマベンケイソウ | 1c, 3d | Y | Y | - | |
| <i>Myosotis arvensis</i> (L.) Hill | ノハラムラサキ | 1b | Y | Y | - | |
| Convolvulaceae | | | | | | |
| <i>Calystegia soldanella</i> (L.) R.Br. | ハマヒルガオ | 3d | Y | Y | - | |
| Oleaceae | | | | | | |
| <i>Fraxinus lanuginosa</i> Koidz. f. <i>serrata</i> (Nakai) Murata | アオダモ | 3a | Y | Y | - | |
| Plantaginaceae | | | | | | |
| <i>Linaria japonica</i> Miq. | ウンラン | 3d | Y | Y | - | |
| <i>Plantago asiatica</i> L. | オオバコ | 1b, 2c, 3c | Y | Y | - | |
| <i>Plantago camtschatica</i> Cham. ex Link | エゾオオバコ | 1c, 2d | Y | Y | - | |
| | | 3d | F | F | 125 | |
| <i>Veronica americana</i> (Raf.) Schwein. ex Benth. | エゾノカワヂシャ | 1d, 3c | Y | Y | - | 3c: along streams |
| | | 2c | Y | F | 74 | |
| <i>Veronica schmidtiana</i> Regel subsp. <i>schmidtiana</i> | キクバクワガタ | 1c | Y | Y | - | |
| Scrophulariaceae | | | | | | |
| <i>Scrophularia alata</i> A.Gray | エゾヒナノウスツボ | 2d, 3d | Y | Y | - | |
| Lamiaceae | | | | | | |
| <i>Clinopodium chinense</i> (Benth.) Kuntze subsp. <i>grandiflorum</i> (Maxim.) H.Hara | クルマバナ | 3d | Y | Y | - | |
| <i>Glechoma hederacea</i> L. subsp. <i>grandis</i> (A.Gray) H.Hara | カキドオシ | 1d | Y | Y | - | |
| <i>Lamium album</i> L. var. <i>barbatum</i> (Siebold & Zucc.) Franch. & Sav. | オドリコソウ | 1b, 2d, 3a | Y, I | Y, I | - | |
| <i>Lycopus lucidus</i> Turcz. ex Benth. | シロネ | 2c, 4a | Y | Y | - | |
| <i>Lycopus uniflorus</i> Michx. | エゾシロネ | 2c | Y | B | 67 | |
| <i>Prunella vulgaris</i> L. subsp. <i>asiatica</i> (Nakai) H.Hara | ウツボグサ | 2e, 3a, 4a | Y | Y | - | |

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| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No.for “Kunashiri-2013” | Remarks** |
|--|----------------|------------------------|------------|-------------------|-------------------------------------|----------------------------------|
| <i>Scutellaria shikokiana</i> Makino | ミヤマナミキ | 3a | Y | B | 99 | |
| <i>Scutellaria strigillosa</i> Hemsl. | ナミキソウ | 3d | Y | Y | - | |
| <i>Stachys aspera</i> Michx. var. <i>hispidula</i> (Regel) Vorosch. | イヌゴマ | 4a | Y | Y | - | |
| Orobanchaceae | | | | | | |
| <i>Euphrasia maximowiczii</i> Wettst. var. <i>yezoensis</i> (H.Hara) H.Hara ex T.Yamaz. | エゾコゴメグサ | 1b | Y | Y | - | |
| <i>Pedicularis resupinata</i> L. subsp. <i>oppositifolia</i> (Miq.) T.Yamaz. | シオガマガク | 2d | I | Y | 53 | |
| <i>Rhinanthus angustifolius</i> C.C.Gmel. subsp. <i>grandiflorus</i> (Wallr.) D.A.Webb | オクエゾガラガラ | 1b | Y | Y | - | |
| Aquifoliaceae | | | | | | |
| <i>Ilex crenata</i> Thunb. var. <i>radicans</i> (Nakai) Murai | ハイイヌツゲ | 4a | Y | Y | - | RD(S)(<i>I. crenata</i> Thunb.) |
| <i>Ilex rugosa</i> F.Schmidt | ツルツゲ | 3a, 4b | Y | Y | - | |
| Campanulaceae | | | | | | |
| <i>Adenophora triphylla</i> (Thunb.) A.DC. var. <i>japonica</i> (Regel) H.Hara | ツリガネニンジン | 2d, 3d | Y | Y | - | |
| <i>Lobelia sessilifolia</i> Lamb. | サワギキョウ | 4a | Y | Y | - | |
| <i>Peracarpa carnosa</i> (Wall.) Hook.f. & Thomson | タニギキョウ | 3a | Y | Y | - | |
| | | 3a | Y | B | 100 | |
| Menyanthaceae | | | | | | |
| <i>Menyanthes trifoliata</i> L. | ミツガシワ | 4a | Y | Y | - | |
| Asteraceae | | | | | | |
| <i>Achillea alpina</i> L. subsp. <i>japonica</i> (Heimerl) Kitam. | キタノコギリソウ | 2d | Y | Y | - | RD(J) |
| <i>Achillea millefolium</i> L. | セイヨウノコギリソウ | 2c | Y | Y | - | |
| <i>Achillea ptarmica</i> L. subsp. <i>macrocephala</i> (Rupr.) Heimerl | エゾノコギリソウ | 1c, 2d, 3d | Y | Y | - | |
| <i>Anaphalis margaritacea</i> (L.) Benth. & Hook.f. subsp. <i>margaritacea</i> | ヤマハハコ | 1b, 2c, 2d, 2e | Y, I | Y, I | - | |
| <i>Arctium lappa</i> L. | ゴボウ | 1b | Y | Y | - | |
| <i>Artemisia indica</i> Willd. var. <i>maximowiczii</i> (Nakai) H.Hara | ヨモギ | 1b, 2b, 2d | Y | Y | - | |
| <i>Artemisia japonica</i> Thunb. | オトコヨモギ | 3b | F | Y | 93 | |
| | | 3c | Y | Y | - | along streams |
| <i>Artemisia japonica</i> Thunb. subsp. <i>littoricola</i> (Kitam.) Kitam. | ハマオトコヨモギ | 2d | I | I | - | |
| <i>Artemisia koidzumii</i> Nakai | ヒロハウラジロヨモギ | 2d | I | I | - | |
| <i>Artemisia montana</i> (Nakai) Pamp. | オオヨモギ | 1b, 2d | I | I | - | |
| | | 3a, 3c, 3d | Y | Y | - | |
| <i>Artemisia stelleriana</i> Besser | シロヨモギ | 3d | F | F | 124 | |
| <i>Cirsium kamtschaticum</i> Ledeb. ex DC. | チシマアザミ | 1b, 2b, 2c, 2d, 3c | F | F | - | |
| | | 2e | F | F | 80 | |
| <i>Cirsium pectinellum</i> A.Gray | エゾノサワアザミ | 3d | F | F | 116 | |
| | | 4a | Y | Y | - | |
| <i>Erigeron annuus</i> (L.) Pers. | ヒメジョオン | 1b, 2c, 3c | Y | Y | - | |
| <i>Erigeron strigosus</i> Muhl. ex Willd. | ヘラバヒメジョオン | 4a | F | Y | 157 | |
| <i>Eupatorium glehnii</i> F. Schmidt ex Trautv. | ヨツバヒヨドリ | 1b | F | B | 24 | |
| | | 3a, 2c | Y | Y | - | |
| <i>Hieracium umbellatum</i> L. | ヤナギタンポポ | 2c | Y | B | 62 | |
| <i>Ixeridium dentatum</i> (Thunb.) Tzvelev subsp. <i>nipponicum</i> (Nakai) J.H.Pak & Kawano var. <i>albiflorum</i> (Makino) Tzvelev | シロバナニガナ | 2c, 2e | Y | Y | - | |
| <i>Ixeris repens</i> (L.) A.Gray | ハマニガナ | 3d | Y | Y | - | |
| <i>Leontodon autumnalis</i> L. | アキノタンポポモドキ | 2c | Y | F | 63 | |
| | | 3c, d | Y | Y | - | |
| <i>Leucanthemum vulgare</i> Lam. | フランスギク | 2c, 3c | Y, I | Y, I | - | |
| <i>Ligularia hodgsonii</i> Hook.f. | トウゲブキ | 3d | F | F | 114 | |
| | | 2e, 4a | Y | Y | - | |
| <i>Matricaria matricarioides</i> (Less.) Ced.Porter ex Britton | コシカギク | 1b | Y | Y | - | |
| <i>Parasenecio hastatus</i> (L.) H.Koyama subsp. <i>orientalis</i> (Kitam.) H.Koyama | ヨブスマソウ | 1a, 2b, 2c, 3a | Y | Y | - | |
| <i>Parasenecio kamtschaticus</i> (Maxim.) Kadota | ミミコウモリ | 1a, 2b, 2e, 3a | Y | Y | - | |
| <i>Petasites japonicus</i> (Siebold & Zucc.) Maxim. subsp. <i>giganteus</i> (G.Nicholson) Kitam. | アキタブキ | 1d, 2b, 2c, 2d, 3a, 3c | Y, I | Y, I | - | |
| <i>Picris hieracioides</i> L. subsp. <i>japonica</i> (Thunb.) Krylov | コウゾリナ | 3d | F | F | 128 | |
| | | 3d | I | I | - | |

Continued

Table 2. Continued.

| Family/species names | Japanese names | Localities | Coll. * | Identified by* | Specimen No. for “Kunashiri-2013” | Remarks** |
|--|----------------|------------------------|------------|-------------------|--------------------------------------|---|
| <i>Picris hieracioides</i> L. subsp. <i>kamtschatica</i> (Ledeb.) Hultén | カンチコウヅリナ | 1b, 3d | Y | Y | - | |
| <i>Saussurea fauriei</i> Franch. | フォーリーアザミ | 2d | Y | Y | - | RD(J) |
| <i>Saussurea riederi</i> Herder subsp. <i>yezoensis</i> (Maxim.) Kitam. | ナガバキタアザミ | 2d | I | I | - | |
| <i>Senecio cannabifolius</i> Less. | ハンゴンソウ | 1a, 1b, 3a, 4a | Y | Y | - | |
| <i>Senecio nemorensis</i> L. | キオン | 1b, 2d | I | I | - | |
| | | 3d | F | Y | 108 | |
| <i>Senecio pseudoarnica</i> Less. | エゾオグルマ | 2d | Y | Y | - | |
| <i>Solidago virgaurea</i> L. subsp. <i>asiatica</i> (Nakai ex H.Hara) Kitam. ex H.Hara | アキノキリンソウ | 1a, 2b, 2e, 3a, 3c, 3d | Y | Y | - | |
| <i>Sonchus brachyotus</i> DC. | ハチジョウナ | 3d | Y | Y | - | |
| <i>Taraxacum officinale</i> Weber ex F.H.Wigg. | セイヨウタンポポ | 1b, c, d, 3a, 3c | Y | Y | - | |
| <i>Taraxacum shikotanense</i> Kitam. | シコタンタンポポ | 2d | Y | Y | - | |
| Adoxaceae | | | | | | |
| <i>Adoxa moschatellina</i> L. | レンブクソウ | 3a | Y | Y | 102 | |
| <i>Sambucus racemosa</i> L. subsp. <i>kamtschatica</i> (E.L.Wolf) Hultén | エゾニワトコ | 2b, 3a | Y, I | Y, I | - | |
| <i>Viburnum furcatum</i> Blume ex Maxim. | オオカメノキ | 2b | Y | Y | - | |
| <i>Viburnum wrightii</i> Miq. | ミヤマガマズミ | 2b | Y | Y | - | RD(R) |
| Caprifoliaceae | | | | | | |
| <i>Lonicera caerulea</i> L. var. <i>emphylocalyx</i> (Maxim.) Nakai | クロミノウグイスカグラ | 3d | F | Y | 120 | |
| <i>Lonicera glehnii</i> F. Schmidt | エゾヒョウタンボク | 1a | Y | B | 51 | RD(J) |
| Araliaceae | | | | | | |
| <i>Aralia cordata</i> Thunb. | ウド | 3a, 2b | Y | Y | - | RD(R), RD(S) |
| <i>Aralia elata</i> (Miq.) Seem. | タラノキ | 1a, 2b, 3a | Y, I | Y, I | - | RD(S) |
| <i>Kalopanax septemlobus</i> (Thunb.) Koidz. | ハリギリ | 1a, 2b, 3a | Y | Y | - | RD(R), RD(S) |
| Apiaceae | | | | | | |
| <i>Angelica genuflexa</i> Nutt. | オオバセンキュウ | 1d, 2d | Y, I | Y, I | - | |
| <i>Angelica sachalinensis</i> Maxim. var. <i>sachalinensis</i> | エゾノヨロイグサ | 2d | I | Y, I | - | |
| <i>Angelica ursina</i> (Rupr.) Maxim. | エゾニユウ | 2d | Y | Y | - | |
| <i>Anthriscus sylvestris</i> (L.) Hoffm. subsp. <i>sylvestris</i> | シャク | 1b | Y | Y | - | |
| <i>Bupleurum longiradiatum</i> Turcz. | ホタルサイコ | 2d | I | F | 52 | |
| <i>Cicuta virosa</i> L. | ドクゼリ | 1d, 4a | Y | Y | - | |
| <i>Coelopleurum gmelinii</i> (DC.) Ledeb. | エゾノシシウド | 1b, 2d, 3d | Y | Y | - | |
| <i>Conioselinum chinense</i> (L.) Britton, Sterns & Poggenb. | カラフトニンジン | 2d | I | I | - | |
| | | 3d | Y | Y | - | |
| <i>Cryptotaenia canadensis</i> (L.) DC. subsp. <i>japonica</i> (Hassk.) Hand.-Mazz. | ミツバ | 3a | Y | Y | - | |
| <i>Glehnia littoralis</i> F.Schmidt ex Miq. | ハマボウフウ | 3d | Y | Y | - | |
| <i>Heracleum lanatum</i> Michx. var. <i>lanatum</i> | オオハナウド | 1b, 1c, 1d | Y | Y | - | |
| | | 3d | F | F | 113 | |
| | | 2d | I | I | - | |
| <i>Ligusticum scoticum</i> L. subsp. <i>hultenii</i> (Fernald) Hultén | マルバトウキ | 1b, 1c, 2d | Y | Y | - | Ligusticum scoticum L. subsp. hultenii (Fernald) Hultén |
| | | 3d | F | F | 118 | |
| <i>Peucedanum terebinthaceum</i> (Fisch. ex Trevir.) Fisch. ex Turcz. | カワラボウフウ | 2d | Y | Y | - | |
| <i>Pleurospermum uralense</i> Hoffm. | オオカサモチ | 1a, 1d, 2d, 3a | Y, I | Y, I | - | |
| <i>Sanicula chinensis</i> Bunge | ウマノミツバ | 1b | Y | Y | - | |
| <i>Tilingia ajanensis</i> Regel | シラネニンジン | 2e | F | Y | 78 | |
| <i>Torilis japonica</i> (Houtt.) DC. | ヤブジラミ | 3a | Y | Y | - | |